Docket No.: 27798-00101USPT
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Gerald D. Bohannon, Jr.

Application No.: 09/648906 Confirmation No.: 6971

Filed: August 25, 2000 Art Unit: 1771

For: SYNTHETIC FIBER FILLED EROSION CONTROL BLANKET Examiner: U. C. Ruddock

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This brief is in furtherance of the Notice of Appeal, filed in this case on January 9, 2004.

The fees required under § 1.17(f) and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief is transmitted in triplicate.

This brief contains items under the following headings as required by 37 C.F.R. § 1.192 and M.P.E.P. § 1206:

I. Real Party In Interest
II Related Appeals and Interferences
III. Status of Claims
IV. Status of Amendments
V. Summary of Invention
VI. Issues
VII. Grouping of Claims

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

American Excelsior Company, having a place of business at 850 Avenue H East, Arlington, Texas 76011.

II. RELATED APPEALS AND INTERFERENCES

The Appellant knows of no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 6 claims currently pending in the application.

B. Current Status of Claims

1. Claims canceled: 2, 3, 8, 10-18
2. Claims withdrawn from consideration but not canceled: none
3. Claims pending: 1, 4-7, 9
4. Claims allowed: none
5. Claims rejected: 1, 4-7, 9

C. Claims On Appeal

The claims on appeal are claims 1, 4-7, 9. A copy of the pending claims is attached hereto as Appendix A. Pending claims 1, 4-7, and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,358,356 to Romanek et al. ("Romanek") in view of U.S. Patent No. 5,330,828 to Jacobsen, Jr. et al. ("Jacobsen"), U.S. Patent No. 5,507,845 to Molnar et al. ("Molnar"), and U.S. Patent No. 5,789,477 to Nosker et al. ("Nosker").

IV. STATUS OF AMENDMENTS

Applicant filed an Amendment After Final Rejection on July 2, 2003 with a Request for Continued Examination. The Examiner responded to the Amendment After Final Rejection in a Non-Final Office Action mailed September 10, 2003. In the Office Action mailed September 10, 2003, the Examiner indicated that Applicant's proposed amendment to claim 1 had been entered. Accordingly, the claims enclosed herein as Appendix A incorporate the amendment to claim 1 as indicated in the paper filed July 2, 2003. All presented amendments have been entered and claims 1, 4-7 and 9 are pending.

V. SUMMARY OF INVENTION

The presently-claimed invention is directed generally to an erosion control blanket comprised of a top sheet of netting material, a bottom sheet of netting material and synthetic filler material made substantially of post-consumer recycled polyester which is disposed between the top and the bottom sheet. See e.g. Application p. 5, lines 10-16. The erosion control blanket is designed to prevent soil erosion and runoff while permitting the in-growth of grasses and other vegetation. See Application p. 2, lines 1-3. The erosion control blanket is also formed of a color that blends with the surrounding environment. See Application p. 10, lines 8-10.

VI. ISSUES

Whether a *prima facie* case of obviousness under 35 U.S.C. § 103(a) has been established by the Examiner with respect to the invention as defined by claims 1, 4-7 and 9 based upon Romanek, Jacobsen, Molnar, and Nosker.

VII. GROUPING OF CLAIMS

For purposes of this appeal brief only, and without conceding the teachings of any prior art reference, the claims have been grouped as indicated below:

Group I: Applicant groups claims 1, 4 and 5 such that they stand or fall together on the issue of obviousness under 35 U.S.C. §103 over Romanek in view of Jacobsen, Molnar, and Nosker.

Group II: Applicant groups claim 6 such that it stands or falls alone on the issue of obviousness under 35 U.S.C. §103 over Romanek in view of Jacobsen, Molnar, and Nosker.

Group III: Applicant groups claim 7 such that it stands or falls alone on the issue of obviousness under 35 U.S.C. §103 over Romanek in view of Jacobsen, Molnar, and Nosker.

Group IV: Applicant groups claim 9 such that it stands or falls alone on the issue of obviousness under 35 U.S.C. §103 over Romanek in view of Jacobsen, Molnar, and Nosker.

In Section VIII below, Applicants have included arguments supporting the separate patentability of each claim group as required by M.P.E.P. § 1206.

VIII. ARGUMENTS

1. Introduction

The Examiner has rejected claims 1, 4-7, and 9 under 35 U.S.C. §103(a) as being unpatentable over Romanek, Jacobsen, Molnar, and Nosker. According to the Examiner, the combination of the cited references renders the claimed invention obvious to one of ordinary skill in the art. As discussed below, Examiner's conclusions lack the requisite factual showing as well as the necessary legal basis for a finding of obviousness.

2. Factual Background

A. Claimed Invention

The claimed invention as set forth in independent claim 1 recites:

> An erosion control blanket for controlling erosion and blending in with a surrounding area comprising: a top sheet of a netting material having a color which tends to blend in with the surrounding area;

a bottom sheet of a netting material;
a synthetic filler material being disposed between said top sheet and said bottom sheet;
wherein said synthetic filler material comprises a plurality of crimped polymer fibers, said crimped polymer fibers being arranged to form a three-dimensional matrix;
wherein said synthetic filler material comprises a substantially post-consumer recycled polyester having a color which tends to blend in with the surrounding area.

As set forth above independent claim 1 recites (i) a top sheet of netting material having a color which tends to blend in with the surrounding area, (ii) a bottom sheet of netting material and (iii) a synthetic filler material disposed between said top sheet and said bottom sheet. Figs 1 and 2 illustrate an embodiment of the invention which shows a top sheet of netting material (120), a synthetic filler material (140) and a bottom sheet of netting material (160).

Claim 4 depends from claim 1 and recites that the substantially post-consumer recycled polyester comprises post-consumer recycled polyethylene terephthalate (PET).

Claim 5 depends from claim 4 and recites that the substantially post-consumer recycled polyethylene terephthalate (PET) comprises green soda bottle material.

Claim 6 depends from claim 1 and recites that the synthetic filler material has a resistance to compression value of about 0.210 to about 0.285 psi/gram of fiber.

Claim 7 depends from claim 1 and recites that the synthetic filler material has a percent recovery value of at least about 90% following application of a 0.5 psi compressive load for a period of 5.0 minutes.

Claim 9 depends from claim 1 and recites that the crimped polyester fibers comprise additives to increase resistance to ultraviolet (UV) radiation.

B. Cited Prior Art References

The Examiner has cited four references as prior art during the prosecution of the present application. Applicants have addressed the salient aspects of these references below.

Romanek:

Romanek (primary reference cited by the Examiner) discloses an erosion control mat composed of a scrim[1] (A) having a uniform lightweight web (B) secured to it to form a composite fabric. *See* Romanek, col. 2, lines 37-39; *see also* Figs 1 and 3. As seen in Figs. 1 and 3, the uniform lightweight web (B) is attached to the scrim (A) in manner such that the web material is present on both sides of the scrim in a cross-section view. *See* Fig. 3. The final composite fabric formed or the scrim and/or lightweight web can be colored for aesthetic purposes. *See* Romanek, col. 3, lines 64-66. The materials making up the scrim and the lightweight web may contain stabilizers such as UV stabilizers, bactericide, or other additives when the erosion mat must remain in situ for a long period of time. *See* Romanek, col. 4, lines 2-6.

Jacobsen:

Jacobsen discloses a wood fiber mat which can be used as an erosion control device. *See* col. 1, lines 13-14. The wood fiber mat in Jacobsen may be produced without netting or with netting on one or both sides. *See* Jacobsen, col. 7, lines 51-53.

Molnar:

Molnar discloses a sod mat comprising a sod reinforcement and a layer of planting medium on the sod reinforcement. *See* Molnar, col. 3, lines 57-59. Stable discrete fibers are dispersed within the planting medium. *Id.* The discrete fibers may be crimped and made of polyethylene terephthalate. *See* Molnar, col. 13, lines 56-58 and line 67. The sod mat prevents or substantially retards weeds from growing into and through the sod from below and also encourages plant roots to grow laterally and entangle with the sod reinforcement. *See* Molnar, col. 5, lines 12-15. The sod mats disclosed in Molnar are thick and heavy. *See* Molnar, col. 10, lines 9-10.

Nosker:

[1] A scrim is a cotton or linen fabric of open weave. See Webster's Desk Dictionary, Random House, Inc. 1993.

Nosker discloses a composite building material composed of a polymer component and a distributed coated fiber component made up of coated fibers such as carbon fibers, fiberglass, or a mixture thereof. *See* Nosker, col. 2, lines 10-14. The polymer component is composed of predominantly high density polyethylene (HDPE) along with a small percentage of other materials like PET. *See* Nosker, col. 4, lines 50-52. Nosker discloses the use of the invention for railroad ties. *See* Nosker, col. 6, lines 65-66.

C. Examiner's Application of the Prior Art to the Claimed Invention

Romanek:

In the non-final office action dated September 10, 2003, the Examiner states that "the Examiner is equating Romanek's lightweight web to the three-dimensional synthetic filler" of the claimed invention because the lightweight web "would inherently have some thickness". *See* Office Action dated September 10, 2003 at page 2, paragraph 4. Although the Examiner does not specifically state it, the Office Action suggests that the scrim is analogous to the top sheet of netting of the invention of claim 1. The Examiner admits that Romanek fails to teach a second netting material, that the polyester fibers are crimped, that the polyester is substantially recycled polyethylene terephthalate made of green soda bottle material, that the filler material's resistance to compression value is about 0.210 to about 0.285 psi/gram of fiber and that the filler material shows a percent recovery value of at least 90% following the application of a 0.5 psi compressive load for a period of 5 minutes. *Id.* at page 3.

Jacobsen:

In the non-final office action dated September 10, 2003, the Examiner states that "it would have been obvious to one having ordinary skill in the art to have employed Jacobsen's disclosure of a second netting on the erosion control mat of Romanek et al., motivated by the desire to obtain a mat with increased product strength." *See* Office Action dated September 10, 2003 at page 3.

Molnar:

In the non-final office action dated September 10, 2003, the Examiner states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used Molnar's crimped polyethylene terephthalate fibers in the erosion control mat of Romanek et al., motivated by the desire to obtain an erosion control mat with increased root entanglement." *See* Office Action dated September 10, 2003 at pages 3-4.

Nosker:

In the non-final office action dated September 10, 2003, the Examiner states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the recycled PET of Nosker et al. as the polyester in the filler material of the erosion control mat of Romanek et al. motivated by the desire to reduce the amount of material that is incinerated or sent to a landfill." *See* Office Action dated September 10, 2003 at page 4. Examiner further states "[w]hile Nosker et al. fail to specifically disclose the use of recycled green PET soda bottles, it would have been obvious to have made Nosker's soda bottles green, motivated by the desire to reduce the amount of green soda materials that are incinerated or sent to a landfill and by the desire to obtain a colored erosion control mat." *Id.*

In addition to the above characterizations of the prior art references, the Examiner further states "[a]lthough the combination of Romanek et al., Jacobsen, Jr. et al., Molnar et al., and Nosker et al. fail to disclose that the filler material has a resistance to compression value of about 0.210 to about 0.285 psi/gram of fiber and a percent recovery value of at least 90% following the application of a 0.5 psi compressive load for a period of 5 minutes, **it is reasonable to presume that said percent recovery value is inherent** to the erosion control mat of Romanek et al., Jacobsen, Jr. et al., Molnar et al., and Nosker et al." *Id.* According to the Examiner, the support for the said presumption is "found in the use of like materials, crimped polyester fibers secured to a scrim." *Id.* at pages 4-5 and citing *In re Fitzgerald*, 205 U.S.P.Q. 594 (C.C.P.A. 1980). The Examiner also states that "the claimed property of a resistance to compression value of about 0.210 to about 0.285 psi/gram of fiber and a recovery value of at least 90% following the

application of a 0.5 psi compressive load for a period of 5 minutes would obviously have been present once the Romanek et al., Jacobsen, Jr. et al., Molnar et al., and Nosker et al. erosion control mat is provided. *Id.* at page 5 and citing *In re Best*, 195 U.S.P.Q. 433 (C.C.P.A. 1977).

3. Applicable Law

A. Criteria for a Finding of Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations.[2] The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, **and not based on applicant's disclosure.**[3]

A Motivation to Combine Must Be Shown

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so in the references themselves or in the knowledge generally available to one of ordinary skill in the art.[4] "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art."[5] In other words, "particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected the components for combination in the manner claimed."[6] A mere conclusory statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was

[2] *See* M.P.E.P. § 2143
[3] *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991) (emphasis added)
[4] *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988)
[5] *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000)

made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art **is not sufficient** to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references.[7] The Federal Circuit in *In re Zurko*[8] noted that "deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense' to one of ordinary skill in the art.[9] In other words, *In re Zurko* expressly proscribes any reliance by an examiner on what constitutes the knowledge of one skilled in the art, when the assessment of that knowledge is not based on any evidence in the record. The Federal Circuit reiterated this position in *In re Lee*, where it took issue with the fact that "neither the examiner nor the Board adequately supported the selection and combination of the ... references to render obvious that which [patentee] described."[10]

If a proposed modification would render the prior art teaching being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.[11] If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.[12]

All Claim Limitations Must Be Taught or Suggested

To establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art.[13] In other words, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art."[14] If an independent

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[6] *Id.* at 1371.
[7] *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993) (emphasis added)
[8] 258 F.3d 1379, 1385 (Fed. Cir. 2001)
[9] *Id.* at 1697.
[10] *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002)
[11] *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984)
[12] *In re Ratti*, 270 F.2d 810 (C.C.P.A. 1959)
[13] *In re Royka*, 490 F.2d 981 (C.C.P.A. 1974)
[14] *In re Wilson*, 424 F.2d 1382 (C.C.P.A. 1970)

claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.[15]

In order to rely on a reference under 35 U.S.C. § 103, the reference must be analogous prior art. The examiner must determine what is "analogous prior art" for the purpose of analyzing the obviousness of the subject matter at issue. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be **reasonably pertinent** to the particular problem with which the inventor was concerned."[16]

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would teach away from the claimed invention.[17]

There Must Be a Reasonable Expectation of Success

The prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success.[18] Evidence showing that there is no reasonable expectation of success supports a finding of nonobviousness.[19]

The Examiner has not established a *prima facie* case of obviousness. The Examiner has failed to demonstrate any of the criteria required for a showing of prima facie obviousness, particularly, the requirements that there be a suggestion or motivation to modify the cited references or combine the reference teachings, and that all of the claim limitations be taught or suggested by the prior art. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.[20] As set forth in detail below, a *prima facie* case of obviousness has not been established with respect to the claims on appeal because: (1) the cited references do not disclose

[15] *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988)
[16] *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992) (emphasis added)
[17] *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)
[18] *In re Merck & Co., Inc.*, 800 F.2d 1091 (Fed. Cir. 1986)
[19] *In re Rinehart*, 531 F.2d 1048 (C.C.P.A. 1976)
[20] *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990)

or suggest all of the limitations of the claimed invention; (2) the Examiner has not demonstrated the requisite motivation to combine the references; (3) the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified or render it unsatisfactory for its intended purpose; and (4) the Examiner has used references from nonanalogous areas of endeavour.

B. Rejection of the Claims in Group I as Obvious over the Combination of Romanek, Jacobsen, Molnar and Nosker

The Examiner has twice rejected the claims in Group I, i.e., 1, 4 and 5 as obvious over the combination of Romanek, Jacobsen, Molnar and Nosker. For the reasons set forth below, Applicants respectfully disagree with Examiner's conclusion.

Applicants' invention as set forth in claims 1, 4 and 5, is directed to an erosion control blanket for controlling erosion and blending in with a surrounding area. As set forth above independent claim 1 recites (i) a top sheet of netting material having a color which tends to blend in with the surrounding area, (ii) a bottom sheet of netting material and (iii) a synthetic filler material disposed between said top sheet and said bottom sheet. The synthetic filler material comprises a plurality of crimped polymer fibers, which are arranged to form a three-dimensional matrix. The synthetic filler material comprises a substantially post-consumer recycled polyester having a color that tends to blend in with the surrounding area. Claim 4 depends from claim 1 and recites the additional feature of the substantially post-consumer recycled polyester comprising post-consumer recycled polyethylene terephthalate (PET). Claim 5 depends from claim 4 and recites the additional the feature of the substantially post-consumer recycled polyethylene terephthalate comprising green soda bottle material.

Romanek (Primary Reference):

Romanek discloses an erosion control mat composed of a scrim[21] (A) having a uniform lightweight web (B) **secured to it** to form a composite fabric. *See* Romanek, col. 2, lines 37-39; *see also* Figs 1 and 3. As seen in Figs. 1 and 3, the uniform lightweight web (B) is attached to

the scrim (A) in manner such that the web material is present on both sides of the scrim in a cross-section view. *See* Romanek, Fig. 3. As stated earlier, the Examiner has equated Romanek's lightweight web to the three-dimensional synthetic filler of the claimed invention because the lightweight web "would inherently have some thickness". *See* Office Action dated September 10, 2003 at page 2, paragraph 4. Additionally, the Examiner does not specifically state it, the Office Action suggests that the scrim is analogous to the top sheet of netting of the claimed invention.[22]

The Examiner's analysis of the lightweight web (B) of Romanek as equivalent to the synthetic filler of the claimed invention is incorrect for several reasons: (i) the lightweight web of Romanek (B) is secured to the scrim (A), whereas the synthetic filler of the claimed invention is not secured or attached to the top sheet or bottom sheet of netting material; (ii) the lightweight web of Romanek is either of a uniform (col. 2, line 38) or of a semi-uniform nature (col. 3, line 14), whereas the synthetic filler material of the claimed invention can comprise a randomly dispersed loose crimped polymer fiber arrangement to create a three-dimensional matrix having sufficient loft (page 10, line 1 of the Application); and (iii) by virtue of being secured or bonded to the scrim, the lightweight web of Romanek is equally disposed on both sides of the scrim (Figs 2 and 3 of Romanek), whereas the synthetic filler of the claimed invention is disposed between a top sheet of netting material and a bottom sheet of netting material.

Similarly, the analogy of the scrim (A) in Romanek to the top sheet of netting of the claimed invention is incorrect because the scrim in Romanek serves as an interior support to reinforce the lightweight web secured to it (col. 2, lines 46-47 and Figs. 2 and 3), whereas the top sheet of netting material in the claimed invention is a layer that is located above the synthetic filler material and is not secured to the synthetic filler.

In sum, Romanek does not disclose an erosion control blanket comprising a top sheet netting material and synthetic filler material.

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[21] A scrim is a cotton or linen fabric of open weave. See Webster's Desk Dictionary, Random House, Inc. 1993.
[22] Indeed, the Examiner's analysis, albeit incorrect, would not work without the benefit of this analogy.

Combination of Romanek and Jacobsen

According to the Examiner, the combination of Jacobsen and Romanek discloses the bottom sheet of netting material in the claimed invention. Jacobsen discloses a wood fiber mat which can be used as an erosion control device. *See* Jacobsen, col. 1, lines 13-14. The wood fiber mat in Jacobsen may be produced without netting or with netting on one or both sides. *See* Jacobsen, col. 7, lines 51-53. The Examiner states that "it would have been obvious to one having ordinary skill in the art to have employed Jacobsen's disclosure of a second netting on the erosion control mat of Romanek et al., motivated by the desire to obtain a mat with increased product strength." *See* Office Action dated September 10, 2003 at page 3.

Firstly, the Examiner has failed to specifically show or point to the requisite teaching or suggestion in either Romanek or Jacobsen or in the knowledge generally available to one of ordinary skill in the art, which would motivate one of ordinary skill to combine Romanek and Jacobsen. Merely stating that one of ordinary skill would have been "motivated by the desire to obtain a mat with increased product strength" does not adequately support the selection and combination of the references by the Examiner.

Secondly, as discussed above, Romanek does not disclose either a top sheet netting or the synthetic filler material of the claimed invention. The combination of Jacobsen and Romanek does not cure these deficiencies. In other words, all of the claim limitations are neither taught nor suggested by the combination of the references. Additionally, it should be noted that the netting in Jacobsen is an optional feature. *See* Jacobsen, col. 7, lines 52-53.

Thirdly, modifying the erosion control mat of Romanek with a second netting would render the Romanek erosion mat unsatisfactory for its intended purpose. The object of the invention disclosed in Romanek is to develop an erosion control mat that is lightweight, economical to produce and easy to install. Adding a second netting sheet to the invention of

Romanek would make it heavier[23], less economical (by virtue of having an additional layer) and more difficult to install (due to additional weight).

Lastly, the Examiner's stated purpose of combining the two references namely, "to obtain a mat with increased product strength" is unsupported by any stated objective of the claimed invention.

In sum, the combination of Romanek and Jacobsen does not disclose an erosion control blanket comprising a top sheet netting material, synthetic filler material and a bottom sheet of netting material.

Combination of Romanek and Molnar

According to the Examiner, the combination of Romanek and Molnar discloses the use of polymer fibers in the synthetic filler material of the claimed invention, which are made of polyethylene terephthalate and crimped. Molnar discloses a sod mat comprising a sod reinforcement and a layer of planting medium containing stable discrete fibers. *See* Molnar, col. 3, lines 57-59. The discrete fibers may be crimped and made of polyethylene terephthalate. *See* Molnar, col. 13, lines 56-58 and line 67. The Examiner states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used Molnar's crimped polyethylene terephthalate fibers in the erosion control mat of Romanek et al., motivated by the desire to obtain an erosion control mat with increased root entanglement." *See* Office Action dated September 10, 2003 at pages 3-4.

Once again, the Examiner has failed to specifically show or point to the requisite teaching or suggestion in either Romanek or Molnar or in the knowledge generally available to one of ordinary skill in the art, which would motivate one of ordinary skill to combine Romanek and Molnar. Merely stating that one of ordinary skill would have been "motivated by the desire to obtain an erosion control mat with increased root entanglement" does not adequately support the selection and combination of the references by the Examiner. Molnar relates to a sod mat for

[23] The netting in Jacobsen is optional and used to make the product stronger, i.e., heavier.

preventing weeds from growing into and through the sod mat. *See* Molnar col. 5, lines 12-15. The mat of Romanek allows for improved growth of plants through the erosion control mat without inhibiting plant growth. *See* Romanek, col. 1, lines 46-50. As such, the sod mat of Molnar is utilized for an entirely different purpose than the erosion control mat of Romanek. Accordingly, there is no motivation to combine Romanek, which allows plant life to sprout through the mat, with Molnar, which prevents plant life from penetrating the sod mat.

Secondly, as discussed above, Romanek does not disclose either a top sheet netting or the synthetic filler material of the claimed invention. The combination of Molnar and Romanek does not cure these deficiencies. In other words, all of the claim limitations are neither taught nor suggested by the combination of the references.

Thirdly, the modification of the Romanek invention by using the crimped polyethylene terephthalate fibers of Molnar would change the principle of operation of the Romanek invention. Specifically, the lightweight web and scrim in Romanek are secured to one another. The Examiner has failed to show how the crimped polyethylene terephthalate fibers could be introduced into the lightweight web/ scrim combination of Romanek without destroying the composite fabric of Romanek. Adding crimped polyethylene terephthalate fibers to the invention of Romanek would make it heavier, less economical and more difficult to install (due to additional weight).

Fourthly, Molnar teaches away from the claimed invention. Molnar discloses a sod mat that is used to **prevent weeds from growing through the mat**, while encouraging plant roots to grow laterally and entangle with the sod environment. *See* Molnar, col. 5, lines 12-15. However, the claimed invention **permits** the in-growth of grasses and other vegetation. *See* Application at page 2 , lines 2-3. Therefore, the combination of Romanek and Molnar is improper.

Lastly, the Examiner's stated purpose of combining the two references namely, "to obtain an erosion control mat with increased root entanglement" is unsupported by any stated objective of the claimed invention. Indeed, the use of the claimed invention as an erosion

control mat would not afford it the opportunity to come into contact with roots of any kind, much less permit increased root entanglement.

In sum, the combination of Romanek and Jacobsen does not disclose an erosion control blanket comprising a top sheet netting material, synthetic filler material comprising crimped polyethylene terephthalate and a bottom sheet of netting material.

Combination of Romanek and Noskar

According to the Examiner, the combination of Romanek and Noskar discloses the use of PET as the polyester fiber in the synthetic filler material of the claimed invention. Nosker discloses a composite building material used in **railroad ties** which is composed of a polymer component and a distributed coated fiber component made up of coated fibers such as carbon fibers, fiberglass, or a mixture thereof. *See* Nosker, col. 2, lines 10-14. The polymer component is composed of predominantly high density polyethylene (HDPE) along with a small percentage of other materials like PET. *See* Nosker, col. 4, lines 50-52. The Examiner states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the recycled PET of Nosker et al. as the polyester in the filler material of the erosion control mat of Romanek et al. motivated by the desire to reduce the amount of material that is incinerated or sent to a landfill." *See* Office Action dated September 10, 2003 at page 4. Examiner further states "[w]hile Nosker et al. fail to specifically disclose the use of recycled green PET soda bottles, it would have been obvious to have made Nosker's soda bottles green, motivated by the desire to reduce the amount of green soda materials that are incinerated or sent to a landfill and by the desire to obtain a colored erosion control mat." *Id.*

The Examiner has failed to specifically show or point to the requisite teaching or suggestion in either Romanek or Nosker or in the knowledge generally available to one of ordinary skill in the art, which would motivate one of ordinary skill to combine Romanek and Nosker. Examiner has made several conclusory statements about the choice of PET as the polyester in the filler material and the motivation of one of ordinary skill in the art **to reduce the**

amount of green soda materials, without adequately supporting the selection and combination of the references.

Secondly, Nosker relates to a building material formed from recycled materials. *See* Nosker, Abstract. The building material may be used for high stress applications such as railroad ties. One of ordinary skill in the art would not look to the building materials for high stress applications as described in Nosker for the purpose of fabricating an erosion control mat. As such, Nosker relates to a non-analogous field of endeavor.

Thirdly, as discussed above, Romanek does not disclose either a top sheet netting or the synthetic filler material of the claimed invention. The combination of Nosker and Romanek does not cure these deficiencies. In other words, all of the claim limitations are neither taught nor suggested by the combination of the references.

In sum, the combination of Romanek and Noskar does not disclose an erosion control blanket comprising a top sheet netting material, synthetic filler material comprising PET and a bottom sheet of netting material.

Therefore, claims 1, 4 and 5 are not obvious over the teachings of Romanek in view of Jacobsen, Molnar and Nosker.

C. Rejection of the Claim in Group II as Obvious over the Combination of Romanek, Jacobsen, Molnar and Nosker

The Examiner has twice rejected the claims in Group II, i.e., claim 6 as obvious over the combination of Romanek, Jacobsen, Molnar and Nosker. For the reasons set forth below, Applicants respectfully disagree with Examiner's conclusion.

Claim 6 contains all of the limitations of independent claim 1 and further recites that the synthetic filler material has a resistance to compression value of about 0.210 to about 0.285 psi/gram of fiber.

In addition to the characterizations of the prior art references, the Examiner also states that "the claimed property of a resistance to compression value of about 0.210 to about 0.285 psi/gram of fiber and a recovery value of at least 90% following the application of a 0.5 psi compressive load for a period of 5 minutes **would obviously have been present** once the Romanek et al., Jacobsen, Jr. et al., Molnar et al., and Nosker et al. erosion control mat is provided. *Id.* at page 5 and citing *In re Best*, 195 U.S.P.Q. 430, 433 fn. 4 (C.C.P.A. 1977) (emphasis added) ("There is nothing inconsistent in concurrent rejection for obviousness under 35 USC 103 and for anticipation by inherency under 35 USC 102").

As discussed above, the Examiner has incorrectly characterized the references and improperly combined them to arrive at an unsubstantiated finding of obviousness. When the Examiner is unable able to find specific elements of the claimed invention in the prior art, the Examiner conveniently resorts to a theory of inherency to arrive at the sought-after conclusion. In order for a presumption of inherency to be applicable, "the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes...." *In re Best*, 195 U.S.P.Q. at 433. Applicants have already set forth above the lack of identity between the cited references and the claimed invention. Therefore, the Examiner's use of an inherency theory to find support for a limitation which does not appear in any of the cited references is improper. In sum, claim 6 is not obvious over the teachings of Romanek in view of Jacobsen, Molnar and Nosker.

D. Rejection of the Claim in Group III as Obvious over the Combination of Romanek, Jacobsen, Molnar and Nosker

The Examiner has twice rejected the claims in Group III, i.e., claim 7 as obvious over the combination of Romanek, Jacobsen, Molnar and Nosker. For the reasons set forth below, Applicants respectfully disagree with Examiner's conclusion.

Claim 7 contains all of the limitations of independent claim 1 and further recites that the synthetic filler material has a percent recovery value of at least about 90% following application of a 0.5 psi compressive load for a period of 5.0 minutes.

In addition to the characterizations of the prior art references, the Examiner has also stated that "[a]lthough the combination of Romanek et al., Jacobsen, Jr. et al., Molnar et al., and Nosker et al. fail to disclose that the filler material has a resistance to compression value of about 0.210 to about 0.285 psi/gram of fiber and a percent recovery value of at least 90% following the application of a 0.5 psi compressive load for a period of 5 minutes, **it is reasonable to presume that said percent recovery value is inherent** to the erosion control mat of Romanek et al., Jacobsen, Jr. et al., Molnar et al., and Nosker et al." *See* Office Action dated September 10, 2003 at page 4 (emphasis added). According to the Examiner, the support for the said presumption is "found in the use of like materials, crimped polyester fibers secured to a scrim." *Id.* at pages 4-5 and citing *In re Fitzgerald*, 205 U.S.P.Q. 594 (C.C.P.A. 1980).

As discussed above, the Examiner has incorrectly characterized the references and improperly combined them to arrive at an unsubstantiated finding of obviousness. When the Examiner is unable able to find specific elements of the claimed invention in the prior art, the Examiner conveniently resorts to a theory of inherency to arrive at the sought-after conclusion. In order for a presumption of inherency to be applicable, "the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes...." *In re Best*, 195 U.S.P.Q. at 433. In the cited *In re Fitzgerald* case, the prior art disclosed a product that appeared **to be either identical with or only slightly different** from a product claimed in product-by-process claim. 205 U.S.P.Q. at 594 (emphasis added). Applicants have already set forth above the lack of identity or even mere similarity between the cited references and the claimed invention. Therefore, the Examiner's use of an inherency theory to find support for a limitation which does not appear in any of the cited references is improper. In sum, claim 7 is not obvious over the teachings of Romanek in view of Jacobsen, Molnar and Nosker.

E. Rejection of the Claim in Group IV as Obvious over the Combination of Romanek, Jacobsen, Molnar and Nosker

The Examiner has twice rejected the claims in Group IV, i.e., claim 9 as obvious over the combination of Romanek, Jacobsen, Molnar and Nosker. For the reasons set forth below, Applicants respectfully disagree with Examiner's conclusion.

Claim 9 contains all of the limitations of independent claim 1 and further recites that the crimped polyester fibers comprise additives to increase resistance to ultraviolet (UV) radiation.

Romanek discloses that the materials making up the scrim (A) and the lightweight web (B) may contain stabilizers such as UV stabilizers, bactericide, or other additives when the erosion mat must remain in situ for a long period of time. *See* Romanek, col. 4, lines 2-6.

In the non-final office action dated September 10, 2003, the Examiner states that "the Examiner is equating Romanek's lightweight web to the three-dimensional synthetic filler" of the claimed invention because the lightweight web "would inherently have some thickness". *See* Office Action dated September 10, 2003 at page 2, paragraph 4. Although the Examiner does not specifically state it, the Office Action suggests that the scrim is analogous to the top sheet of netting of the invention of claim 1. Applicants have already demonstrated that Romanek **does not disclose** an erosion control blanket comprising a top sheet netting material and synthetic filler material. Therefore, claim 9 is not obvious over the teachings of Romanek in view of Jacobsen, Molnar and Nosker.

IX. CONCLUSION

In view of the foregoing, Appellants respectfully submit that the claims on appeal are allowable over the art of record. Favorable action and approval of the application for allowance are respectfully requested.

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Respectfully submitted,

By _____
Ashley N. Moore
Registration No.: 51,667
JENKENS & GILCHRIST, A
PROFESSIONAL CORPORATION
1445 Ross Avenue, Suite 3200
Dallas, Texas 75202

(214) 855-4500
(214) 855-4300 (Fax)

APPENDIX A

Claims Involved in the Appeal of Application Serial No. 09/648906

1. (Previously Presented) An erosion control blanket for controlling erosion and blending in with a surrounding area comprising:

a top sheet of a netting material having a color which tends to blend in with the surrounding area;

a bottom sheet of a netting material;

a synthetic filler material being disposed between said top sheet and said bottom sheet;

wherein said synthetic filler material comprises a plurality of crimped polymer fibers, said crimped polymer fibers being arranged to form a three-dimensional matrix;

wherein said synthetic filler material comprises a substantially post-consumer recycled polyester having a color which tends to blend in with the surrounding area.

2-3. (Canceled)

4. (Previously Presented) The erosion control blanket of claim 1, wherein said substantially post-consumer recycled polyester comprises post-consumer recycled polyethylene terephthalate (PET).

5. (Previously Presented) The erosion control blanket of claim 4, wherein said substantially post-consumer recycled polyethylene terephthalate (PET) comprises green soda bottle material.

6. (Original) The erosion control blanket of claim 1, wherein said synthetic filler material has a resistance to compression value of about 0.210 to about 0.285 psi/gram of fiber.

7. (Previously Presented) The erosion control blanket of claim 1, wherein said synthetic filler material has a percent recovery value of at least about 90% following application of a 0.5 psi compressive load for a period of 5.0 minutes.

8. (Canceled)

9. (Previously Presented) The erosion control blanket of claim 1, wherein said crimped polymer fibers comprise additives to increase resistance to ultraviolet (UV) radiation.

10-18. (Canceled)